Standard HDTV Set Up Guide

Explorer 3250HD & 4250HDC

Scientific Atlanta
A CISCO COMPANY

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Questions? Call 503.632.4114

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Change the Way You Watch TV

Congratulations on adding the Explorer® 3250 or 4250HDC High Definition Digital Interactive Set-Top to your television viewing experience!

Your new HD Set Top provides you the ability to view cable television programming for high-definition television (HDTV) as well as standard-definition television (SDTV).

Follow the instructions in this guide to install the 3250HD or 4250HDC and to access your cable services. Then, watch TV and enjoy the features of your HDTV Set Top!

Safety First

Before using the 3250HD, read the **SAFETY COMPLIANCE STATEMENTS** section of this guide.

Keep the top of the 3250HD free of all objects and electronic devices, including your TV.

Identify Your 3250HD or 4250HDC

If your set top requires troubleshooting in the future, your cable service provider may ask for this serial number.

To find the serial number for your Set Top, look on the back for a label that is similar to the example shown here. The serial number begins with SA and is located in the lower left corner of the bar code.

Use the space provided here to record the serial number :

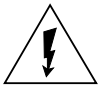
_____

Note to CATV System Installer (USA/Canada Only)

This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC (Section 54, Part I of the Canadian Electrical Code), that provides guidelines for proper grounding and, in particular, specifies that the CATV cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

CAUTION: To reduce the risk of electric shock, do not remove cover (or back). No user-serviceable parts inside. Refer servicing to qualified service personnel.

WARNING
TO PREVENT FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE.



This symbol is intended to alert you that uninsulated voltage within this product may have sufficient magnitude to cause electric shock. Therefore, it is dangerous to make any kind of contact with any inside part of this product.

This symbol is intended to alert you of the presence of important operating and maintenance (servicing) instructions in the literature accompanying this product.

Read and Retain These Instructions

- Read all of the instructions before you operate this set-top. Give particular attention to all safety precautions. Retain the instructions for future reference.
- Comply with all warning and caution statements in the instructions. Observe all warning and caution symbols that are affixed to this set-top.
- Comply with all instructions that accompany this set-top.

Placement

Place this set-top in a location that is close enough to an electrical outlet to accommodate the length of the power cord.

Note: The power cord is the mains power supply disconnect device. Place this set-top on a stable surface. The surface must support the size and weight of this set-top.

WARNING:

AVOID PERSONAL INJURY AND DAMAGE TO THIS SET-TOP. AN UNSTABLE SURFACE MAY CAUSE THIS SET-TOP TO FALL.

Ventilation

This set-top has openings for ventilation that protect it from overheating. To ensure the reliability of this set-top, follow these guidelines to avoid obstructing the openings:

- Do not place other equipment, lamps, books, vases with liquid, or any other object on the top of this set-top.
- Do not place this set-top in any of the following locations:
  - On a bed, sofa, rug, or similar surface
  - Over a radiator or a heat register
  - In an enclosure, such as a bookcase or equipment rack, unless the installation provides proper ventilation

Cleaning the Set-Top

Before cleaning this set-top, unplug it from the electrical outlet. Use a damp cloth to clean this set-top. Do not use a liquid cleaner or an aerosol cleaner. Do not use a magnetic/static cleaning device (dust remover) to clean this set-top.

Object and Liquid Entry

Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Do not expose this set-top to liquid or moisture. Do not place this set-top on a wet surface. Do not spill liquids on or near this set-top.

WARNING:

AVOID ELECTRIC SHOCK AND FIRE HAZARD. NEVER PUSH OBJECTS THROUGH OPENINGS IN THIS SET-TOP. THESE OBJECTS CAN CAUSE ELECTRICAL SHORTS THAT CAN RESULT IN ELECTRIC SHOCK OR FIRE. DO NOT EXPOSE THIS SET-TOP TO RAIN OR MOISTURE. DO NOT PLACE OBJECTS FILLED WITH LIQUID (SUCH AS VASES) ON THIS SET-TOP.

Accessories

Do not use accessories with this set-top unless recommended by your cable service provider.

Overloading

Do not overload electrical outlets, extension cords, or integral convenience receptacles, as this can result in a risk of fire or electric shock. For equipment that requires battery power or other sources to operate, refer to the operating instructions for that equipment.

Lightning and Power Surges

Ground (earth) your cable system to provide some protection against voltage surges and built-up static charges. Plug your set-top into a surge protector to reduce the risk of damage from lightning strikes and power surges. If you have questions, call your cable service provider.

Power Cord Protection

Arrange all power cords so that people cannot walk on the cords, place objects on the cords, or place objects against the cords, which can damage the cords. Give particular attention to the cords at the point at which the cord connects to the plug, at electrical outlets, and at the places where the cords exit the set-top.

Power Sources

A label on this set-top indicates the correct power source for this set-top. Operate this set-top only from an electrical outlet that has the voltage and frequency that the label indicates.

If you are unsure of the type of power supply to your residence, consult your cable service provider or your local power company.

Power Cord Polarization

This set-top has a two-prong plug. Properly ground (earth) this set-top by inserting the plug into a grounded electrical, two-socket outlet. If this plug is polarized, it has one wide prong and one narrow prong. This plug fits only one way.

WARNING:

TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO THE WIDE SLOT, AND THEN FULLY INSERT.

If you are unable to insert this plug fully into the outlet, contact an electrician to replace your obsolete outlet.

Servicing

Do not open the cover of this set-top. If you open the cover, your warranty will be void. Refer all servicing to qualified personnel only. Contact your cable service provider for instructions.

Damage that Requires Service

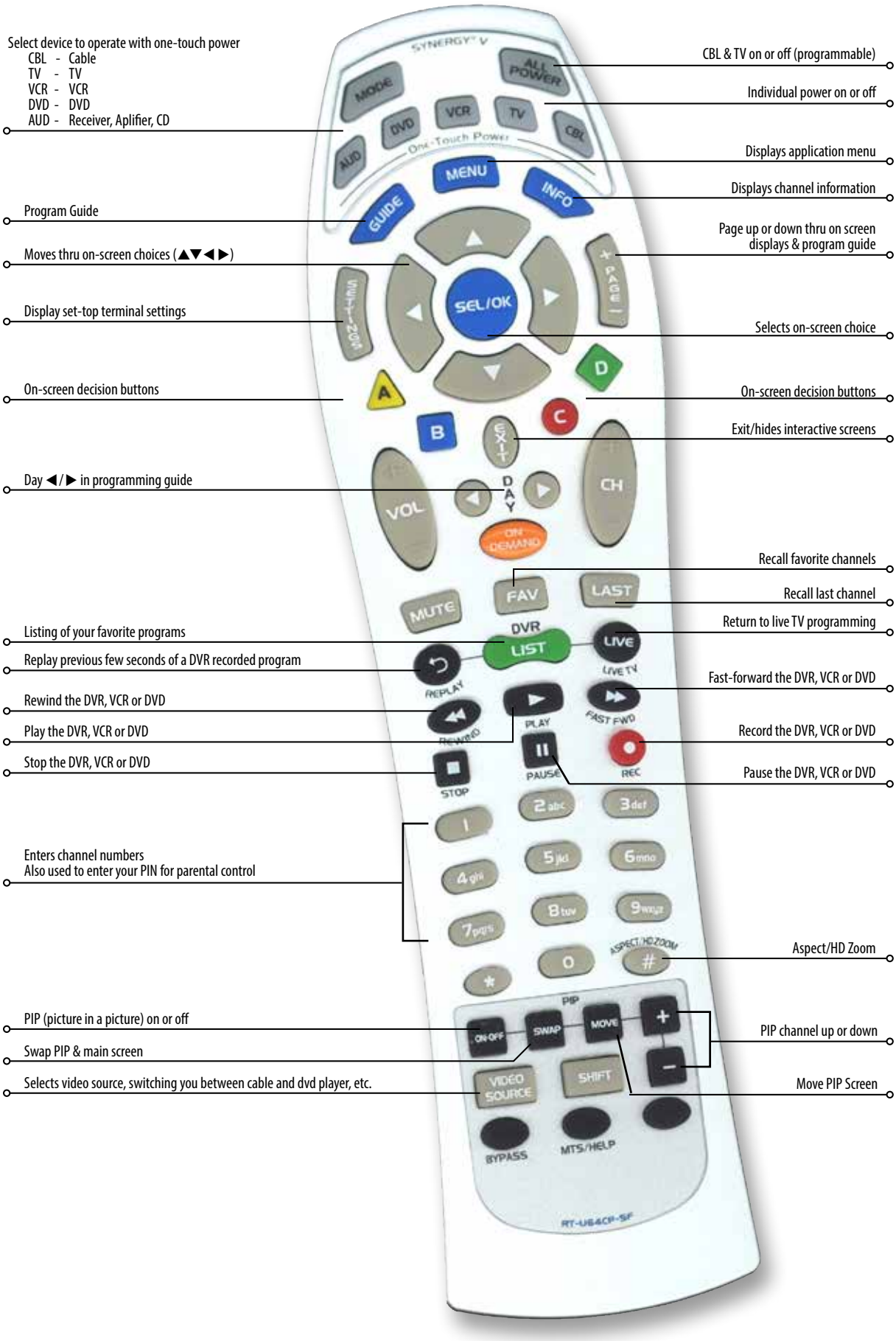
For damage that requires service, unplug this set-top from the electrical outlet. Refer to qualified personnel when any of the following occurs:

- There is damage to the power cord or plug
- Liquid enters the set-top
- There is exposure to rain or water
- Operation is not normal (the instructions in this guide describe the proper operation)
- If you drop this equipment, or damage the cabinet of this set-top
- If this set-top exhibits a distinct change in performance

Upon completion of any service or repairs to this set-top (home terminal), the service technician will perform safety checks to determine that the equipment is in proper operating condition.

your remote control

IMPORTANT: The following diagram shows how to use the buttons on your remote control to operate the DVR and PIP functions on your Set-Top Box. To access these functions, set the remote control to its cable mode by pressing the [MODE] button, followed by the [CBL] button.

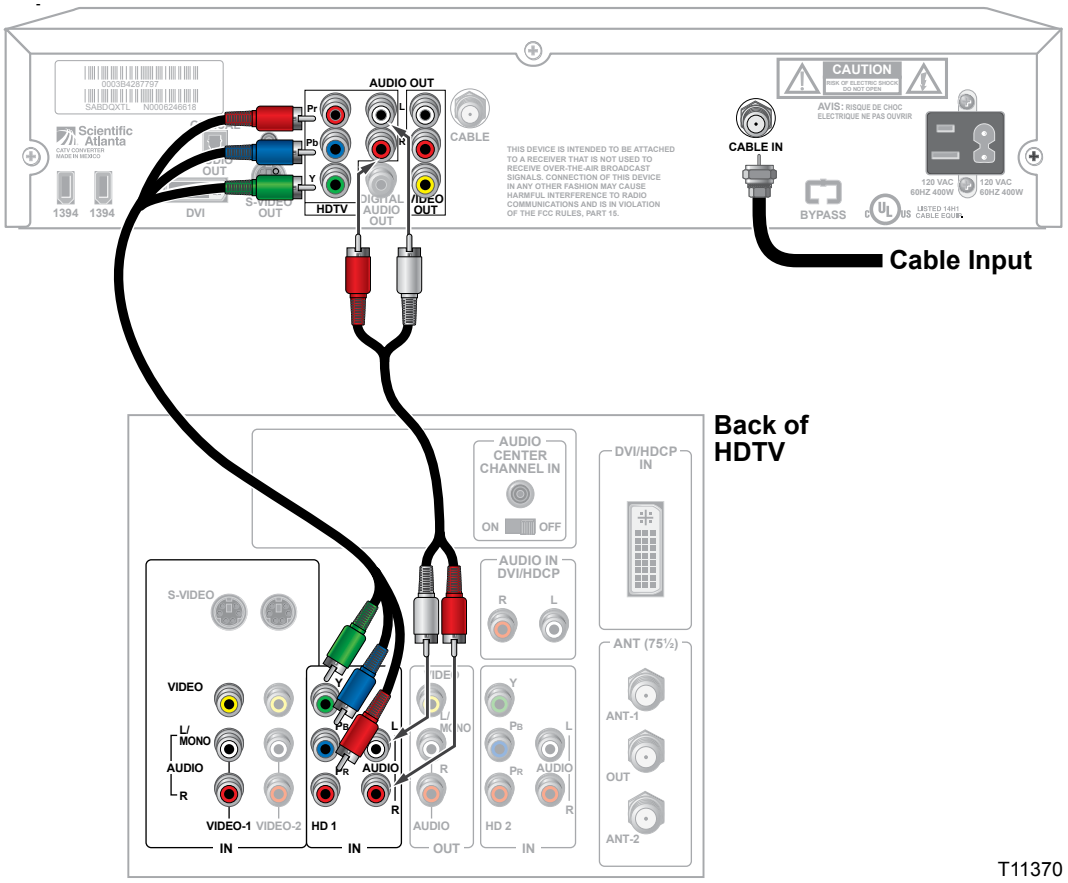


Connecting the 3250HD Using YPbPr Cables and Audio Cables

WARNING:

Electric shock hazard! Unplug all electronic devices before connecting or disconnecting any device cables to the set-top.

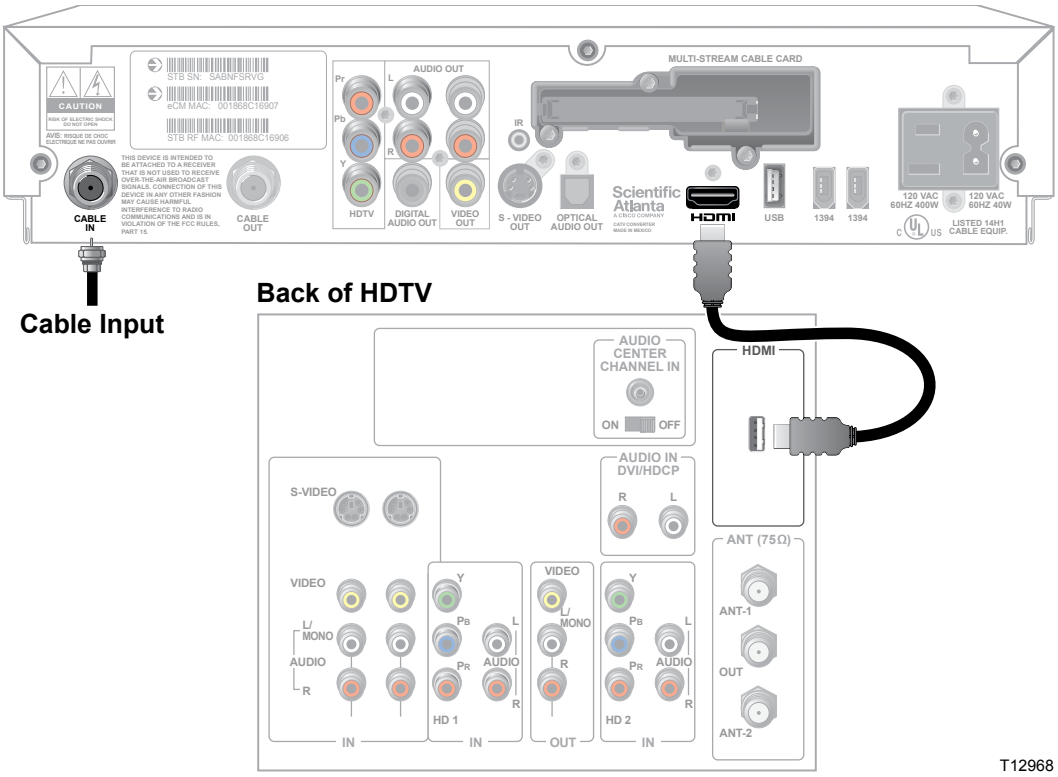
CONNECTING THE 3250HD



Connecting the 4250HDC with an HDMI Connector

WARNING:

Electric shock hazard! Unplug all electronic devices before connecting or disconnecting any device cables to the set-top.



Important Notes Regarding the HDMI Interface on the Set-Top

The HDMI interface automatically configures the audio output for a format supported by the television. Because not all TVs support the Dolby® Digital input, the HDMI interface may automatically select a 2-channel stereo audio configuration instead of Dolby Digital, which it carries over to the other digital audio outputs of the set-top. This prevents your home theater system or Dolby Digital decoder from providing the full Dolby Digital surround-sound effect.

You can override this configuration by completing the following steps.

1. Press **SETTINGS** twice on the remote control to open the General Settings menu.
2. Press **MOVE UP** or **MOVE DOWN** to select the option Audio: Digital Out.
3. Press **MOVE RIGHT** to select Dolby Digital. This setting will send Dolby Digital audio to the HDMI, DIGITAL AUDIO OUT, and OPTICAL AUDIO OUT connectors on the set-top.

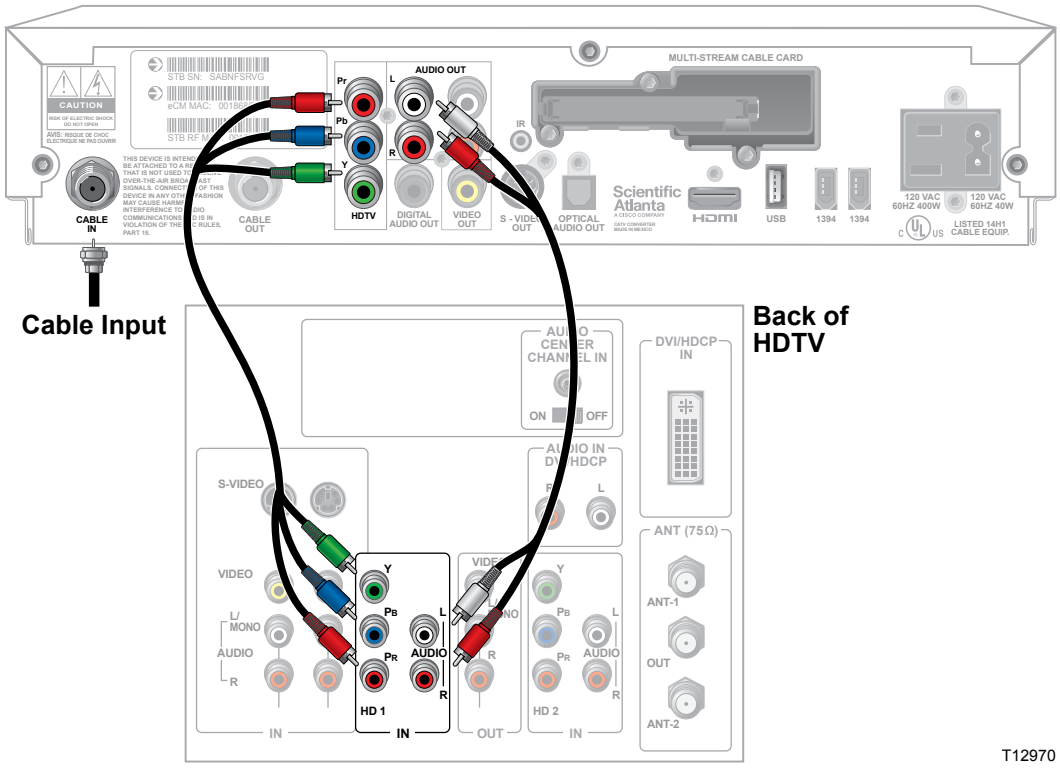
Notes:

- If the TV is not Dolby Digital capable, it may not produce audio through its speakers when the Audio: Digital Out setting on the set-top is set to Dolby Digital. You can either switch the Audio: Digital Out setting back to HDMI when you are not using the home theater or Dolby Digital decoder, or you can connect the baseband audio outputs (OUT 1 Audio Left and Right) to the TV.
- Digital content is encrypted with High-Bandwidth Content Protection (HDCP) on the DVI/HDMI port. This set-top is not compatible with devices that do not support HDCP. You must use either the PrPbY or 1394 connection to connect the set-top to these devices.

Connecting the 4250HDC Using YPbPr Cables and Audio Cables

WARNING:

Electric shock hazard! Unplug all electronic devices before connecting or disconnecting any device cables to the set-top.



Is There More Than One Setup Option?

Yes. The Setup Wizard provides two options **Easy** and **Advanced**. If you choose the **Advanced** option, you can toggle through all the picture formats and select the formats that look best on the HDTV screen.

Note: Use the A, B, C keys on the remote control to navigate through the Setup Wizard menus and options. You may want to have available the user's guide that came with your HDTV for reference.

PLEASE READ THE FOLLOWING INSTRUCTIONS CAREFULLY.

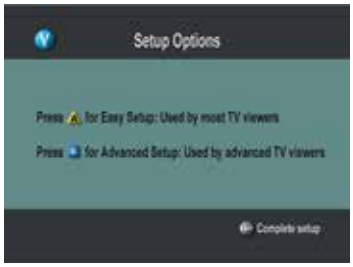
How to Start the Set Up Wizard

1. Make sure the Set Top is <u>OFF</u> and the HDTV is <u>ON</u> & on the correct <u>INPUT</u>.

2. Press the <u>GUIDE</u> and <u>INFO</u> buttons at the same time.

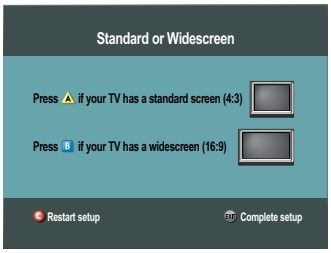
HDTV Setup Wizard
You will be asked a short series of questions that will help you set up your HDTV Setup Box
Press A to start

3. Press A to start the set up.


Setup Options
Press A for Easy Setup: Used by most TV viewers
Press B for Advanced Setup: Used by advanced TV viewers
Complete setup

4. Choose one of the following options:

- **To choose the Easy Setup option press A; then, go to the <u>Easy Setup Instructions</u> on page 11.**
- **To choose the Advanced Setup option press B; then go to the <u>Advanced Setup Instructions,</u> on page 11.**

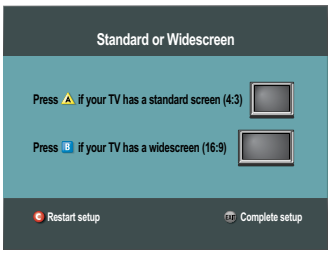

Standard or Widescreen
Press A if your TV has a standard screen (4:3)
Press B if your TV has a widescreen (16:9)
Restart setup
Complete setup

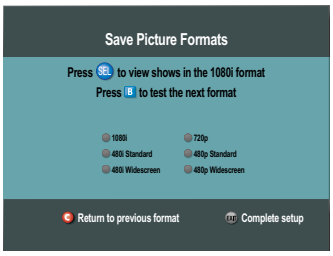
EASY SETUP INSTRUCTIONS

1. Press A or B to select the type of TV screen you have. The setup is complete.
2. Press POWER to begin watching TV.

Notes:

- If you pressed A for the standard screen (4:3) TV setting, the TV is set to receive programming in 480i format on non-HD channels and 1080i format on HD channels.
- If you pressed B for the widescreen (16:9) setting, the TV is set to only receive programming in 1080i format (even on non-HD channels).


Standard or Widescreen
Press A if your TV has a standard screen (4:3)
Press B if your TV has a widescreen (16:9)
Restart setup
Complete setup



ADVANCED SETUP INSTRUCTIONS

1. Press A or B to select the type of TV screen you have and display an Instructions screen.
2. The Instructions screen tells you that various picture formats will be displayed for your selection.
3. *Before you begin selecting picture formats*, read the following:

   IMPORTANT! If you see a black screen or if the picture quality is not optimal, *do not* press SELECT. Press B again to view the next screen format.
4. Follow the on-screen instructions to select your picture formats.
5. Press SELECT to toggle between the Save and Remove options, or press B to see how the next format looks on your TV screen.
6. After finding the best picture format, press EXIT. The setup is complete.
7. Press POWER to begin watching TV.

Picture Formats and Your HDTV Display

The following table shows the relationship between the picture format method, the signal the DVR receives, and the format of the picture that displays on your TV screen.

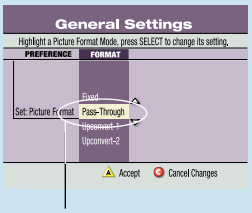
	If you chose this picture format method:	And the DVR receives this signal:	The HDTV displays the picture in this format:
	Fixed	1080i, 720p, 480i, 480p	Picture format selected in the Quick Settings menu
** IDEAL FOR 5-WIRE COMPONENT CONNECTION	**Pass-Through** or **Auto-DVI**	1080i 720p 480i 480p	1080i 720p 480i 480p
	Upconvert 1	480i/480p 720p/1080i	480p 1080i
	Upconvert 2	480i/480p 720p/1080i	480p 1080i
** IDEAL FOR HDMI CONNECTION	**AUTO DVI/HDMI**	480i/480p 720p/1080i	480p 1080i

General Settings: Set Picture Format

Upconvert 1 and Upconvert 2 - When possible, the DVR tries to improve the program display by taking an SD picture and changing it to a simulated HD picture (upconverting).

Fixed - All programming is displayed using the picture format you last selected. This setting remains *fixed* until you select a new picture format from the Quick Settings menu.

Pass-Through or Auto DVI - The programming format is not manipulated by the DVR. The DVR passes the signal through to the TV. (See the box on the previous page for more information about Pass-Through.)



If your HDTV uses a DVI or HDMI port, **Auto DVI/HDMI** appears here instead of **Pass-Through**.

PLEASE NOTE If using HDMI and there is no audio, you need to go to the settings menu and go to Audio>Digital output to HDMI.

Adjust Your Picture Format Using Quick Settings

Because the picture quality of a program is affected by many factors, such as how the program was originally recorded and the method used to broadcast the program, you may find that displaying certain programs in a specific picture format provides the picture quality you prefer.

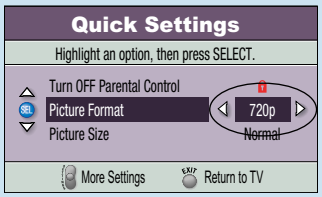
Note: If your HDTV uses a composite, DVI, or HDMI port, it automatically selects the best picture format for the program you are watching. DVI ports, however, can choose only from the picture formats that your HDTV supports.

1. Press SETTINGS to access Quick Settings.
2. Press or to select **Picture Format**.
3. Press to select the picture format setting.
4. Press again to display another picture format setting. Each time you press , another setting displays.

Note: If you used the Setup Wizard to select picture format settings and your General Setting is not set to Pass-Through, the picture format settings that you selected are available here. For example, if you used the Easy Setup method in the Setup Wizard, only the settings 480i and 1080i are available for you to select.

5. Press SELECT to view the picture with this setting.
6. If necessary, repeat these steps to find a setting that you prefer.

Note: If you select **Pass-Through** or **Auto DVI/HDMI** in the **General Settings: Set Picture Format**, you cannot change the Picture Format in the Quick Settings menu (the Picture Format option will not be shown). You can only stretch and zoom the picture with the **#** key on the remote *or* within Quick Settings.



Pass-Through means that the DVR does not change the active signal it receives. It is just passing the signal through to the TV. Changing the picture format in **General Settings: Set Picture Format** to **Fixed** lets you "fix" or adjust the format in Quick Settings.

Adjust Your HD Picture Using General Settings

You can adjust how your DVR displays pictures using the Picture Format and TV Borders General Settings menu options.

Set Your Default Picture Format

By automating picture adjustments, the DVR uses a method that you choose to automatically select the picture format that provides the best display possible. The methods that you can select from depend partly on the type of video connection your HDTV uses.

1. Press SETTINGS twice to access General Settings.
2. Press ▲ or ▼ to select **Set: Picture Format**.
3. Press ▶ to select the picture format setting.
4. Press ▲ or ▼ to display each option.

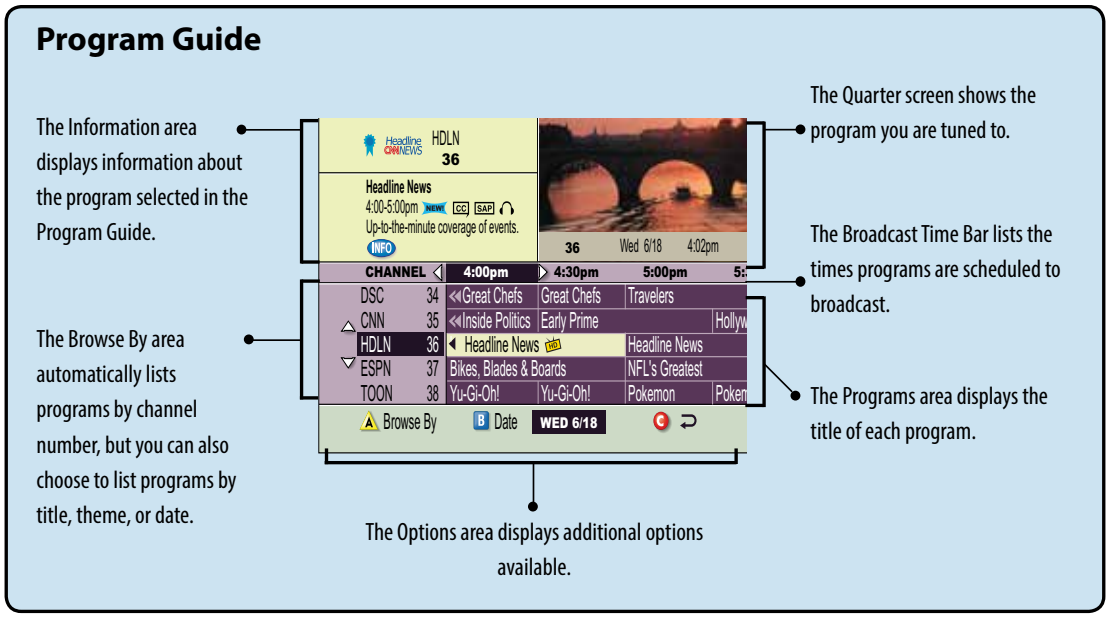
   Note: See the "General Settings: Set Picture Format" box on the next page for an explanation of each option.
5. Press A to accept the option for the DVR.

Note: The Explorer 8300™ DVR (8300) front panel displays the selected option and scan rate. For example, if you selected Pass-Through, the 8300 front panel displays **AUTO**.

6. Press EXIT to return to normal viewing.

Display the Program Guide

1. Press GUIDE to access the Program Guide.
2. To close the guide, press GUIDE or EXIT. The Program Guide closes and displays the program that was playing in the Quarter screen.


Program Guide
The Information area displays information about the program selected in the Program Guide.
The Browse By area automatically lists programs by channel number, but you can also choose to list programs by title, theme, or date.
The Quarter screen shows the program you are tuned to.
The Broadcast Time Bar lists the times programs are scheduled to broadcast.
The Programs area displays the title of each program.
The Options area displays additional options available.
HDLN 36
Headline News
4:00-5:00pm
Up-to-the-minute coverage of events.
INFO
36 Wed 6/18 4:02pm
CHANNEL 4:00pm 4:30pm 5:00pm
DSC 34 Great Chefs Great Chefs Travelers
CNN 35 Inside Politics Early Prime
HDLN 36 Headline News Headline News
ESPN 37 Bikes, Blades & Boards NFL's Greatest
TOON 38 Yu-Gi-Oh! Yu-Gi-Oh! Pokemon
Browse By
Date
WED 6/18

Search for a Program by Channel, Title, or Theme

The Set Top automatically lists programs by channel number, but you can change this and list programs by title or theme.

1. Press GUIDE to access the Program Guide.
2. Press A. The Browse By area of the Program Guide displays the options: Title, Channel, and Theme.
3. Press ▲ or ▼ to select one of the following options:
   - **Channel**, which lists programs numerically by channel number
   - **Title**, which lists programs alphabetically by program title
   - **Theme**, which lists programs by theme, such as adventure, comedy, sports, or news
4. Press SELECT. The Browse By area of the Program Guide displays the programs according to the option you selected.
5. Press C to return to the previous screen displayed.

Note: The Browse By option only shows programs for the current date. For information about searching on different dates, see pg 15.

Search for a Program by Date

1. Press GUIDE to access the Program Guide.
2. Press B. The Browse By area of the Program Guide displays a list of upcoming dates.
3. Press ▲ or ▼ to select a date.
4. Press SELECT. The Program Guide displays the programs scheduled to be broadcast on that date.
5. Press C to return to the previous screen displayed.

Browse By Options

Browse By Channel

Channel lists programs numerically by channel number.

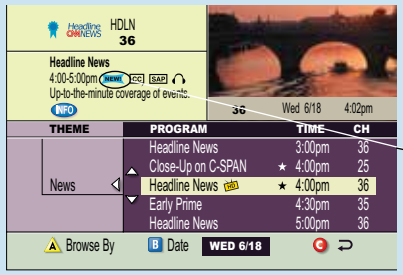
Note: HD next to a program indicates that the program is a high-definition broadcast.

Browse By Title

Title lists programs alphabetically by program title.

Note: The Parental Guide information is listed in the program description.

Note: A star next to a program indicates that the program is currently being broadcast.



Browse By Theme

Theme lists programs by theme, such as adventure, comedy, sports, or news.

Note: New next to a program indicates that the program is a on for the first time (first-run program).

Select a Program from the Program Guide

1. Press GUIDE to access the Program Guide.
2. Press ◆ to move through the program listings to select the program you want to watch.
3. Press SELECT.
   - If the program is currently on, the Program Guide closes and the program you selected appears in full-screen TV.
   - If the program is scheduled for a future time, the Future Program Options screen appears.
4. Choose one of the following Future Program options:
   - To tune to the future program channel immediately, choose the "Tune [channel number/name], immediately" option.
   - To set a reminder timer for the future program, choose the "Set Reminder Timer for [program name]" option. When selected, an on-screen banner is displayed 2 minutes prior to the start of the future program to remind you to watch the program.

FCC Compliance

United States FCC Compliance

This device has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against such interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy. If not installed and used in accordance with the instructions, it may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment OFF and ON, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna, if applicable.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the cable company or an experienced radio/television technician for help.

Any changes or modifications not expressly approved by Scientific-Atlanta, Inc., could void the user's authority to operate the equipment.

The information shown in the FCC Declaration of Conformity paragraph below is a requirement of the FCC and is intended to supply you with information regarding the FCC approval of this device. The phone numbers listed are for FCC-related questions only and not intended for questions regarding the connection or operation for this device. Please contact your cable service provider for any questions you may have regarding the operation or installation of this device.

FC Declaration of Conformity

This device complies with Part 15 of FCC Rules. Operation is subject to the following two conditions:
1) the device may not cause harmful interference, and 2) the device must accept any interference received, including interference that may cause undesired operation.

EXPLORER 4250HDC
Digital Interactive Set-top
Model: 4250HDC

EXPLORER® 3250HD
Digital Interactive Set-top
Model: 3250HD

Manufactured by: Scientific-Atlanta, Inc.;
5030 Sugarloaf Parkway;
Lawrenceville, Georgia 30044; USA
Telephone **770-236-1077**

Software and Firmware Use

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